ANCIENT EGYPT

UNIVERSITY OF INSTITUTE OF ARCHÆOLOGY LONDON

1932. MARCH. PART I.

CONTENTS.

1. PALACES OF ANCIENT GAZA.
FLINDERS PETRIE.

2. ANCIENT DEFENCES OF GAZA.
LIEUT.-COL. N. P. CLARKE.

3. STATUETTE OF PEPY, SON OF SENTMUT.
R. ENGELBACH.

4. A TOWN IN OLD NUBIA.
J. H. DUNBAR.

5. REVIEWS :
OLMSTEAD'S PALESTINE.
OSIRIS.
MARC ANTONY.

6. JOURNALS :
PALESTINE EXPLORATION FUND.
ANTIQUITY.
BULL . . . ETUDI MEDITERRANEI.
BLACKWOOD.
MANCHESTER EGYPTIAN SOC.

7. NOTES AND NEWS.

EDITOR, PROF. SIR FLINDERS PETRIE, F.R.S., F.B.A.

YEARLY, 7*s.* POST FREE. QUARTERLY PART, 2*s.*

BRITISH SCHOOL OF ARCHAEOLOGY IN EGYPT.

MACMILLAN AND CO., LONDON
AND NEW YORK.

ANCIENT EGYPT. Net price of each number from booksellers is 2s.

Subscriptions for the four quarterly parts, prepaid, post free, 7s., or 2 dollars, are received by Hon. Sec. " Ancient Egypt " (H. Petrie), University College, Gower Street, London, W.C. 1.

Books for review, papers offered for insertion, or news, should be addressed :—

Editor of " Ancient Egypt,"
University College, Gower Street, London, W.C. 1.

THE PALACES OF ANCIENT GAZA.
TELL EL AJJŪL.

After the discovery last year of the Canaanite and Hyksos city of Tell el Ajjūl, it was plainly desirable, next, to find the more important buildings of the city. The presumption that the north or west sides of sites were the more favoured, for the sake of coolness, led to finding at Gerar the fort and residency of Psamtek,

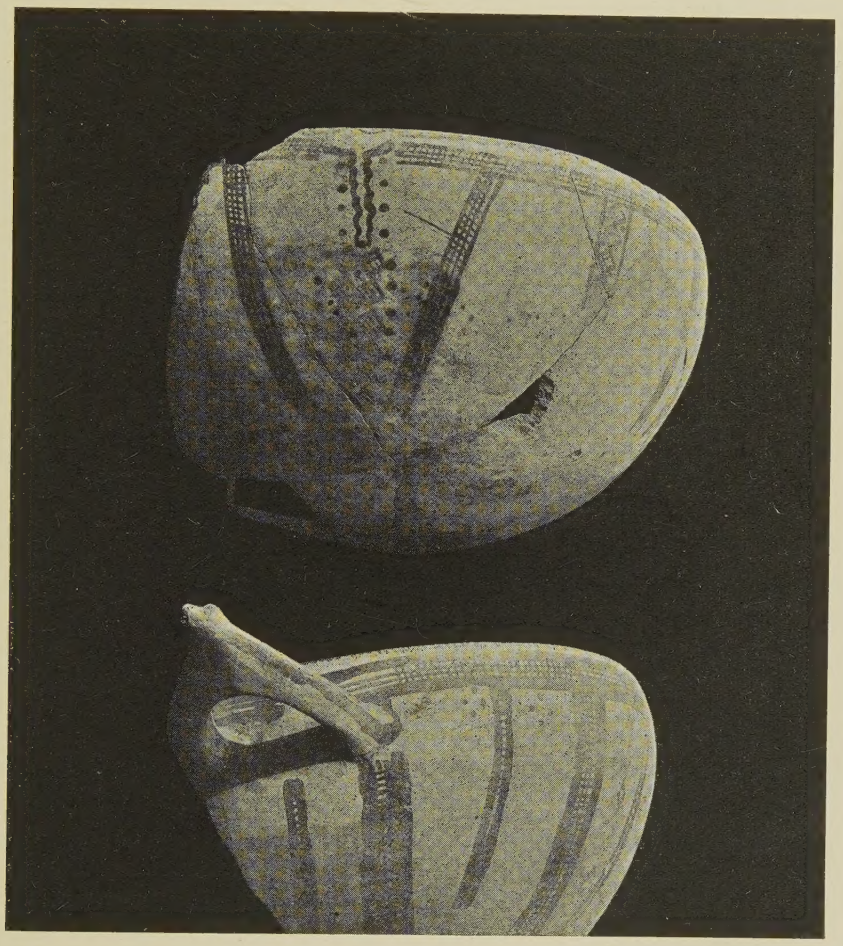


Fig. 1.—Decorated Bowl, Anatolian ?
Fig. 2.—Coarse Cypriote Imitation.

at Beth-pelet the residencies of Vespasian, of Shishak, and of the XVIII–XIXth dynasties. At Ancient Gaza, therefore, I settled to work on the north end of the west side, facing the sea.

We soon found walls 40 inches thick, double the width of those for private houses. There were but a few inches of the base left standing after the heavy denudation which had taken place; we searched below for earlier walls, but found only heaped-up native sand and gypsum. Gradually it appeared that

each of the successive builders here had piled up earth outside the original bank to raise it, and built on the new ground further out. At first this part of the hill was but a dozen feet above the land outside, but that was raised by piling and by ruins until it is now 20 feet higher.

The condition of the site needed continual care to guard against confusion. It had been heavily denuded into a long slope extending down through about 16 feet. All over this slope, Arab squatters had settled in the middle ages and left their pottery mingled with that of older levels. Not only so, but they had dug numberless grain pits, filled up later with rubbish, which might thus be 10 feet below its surface. So soon as a pit was noticed, it was entirely cleared out, and all the contents removed from contact with earlier remains. The extent

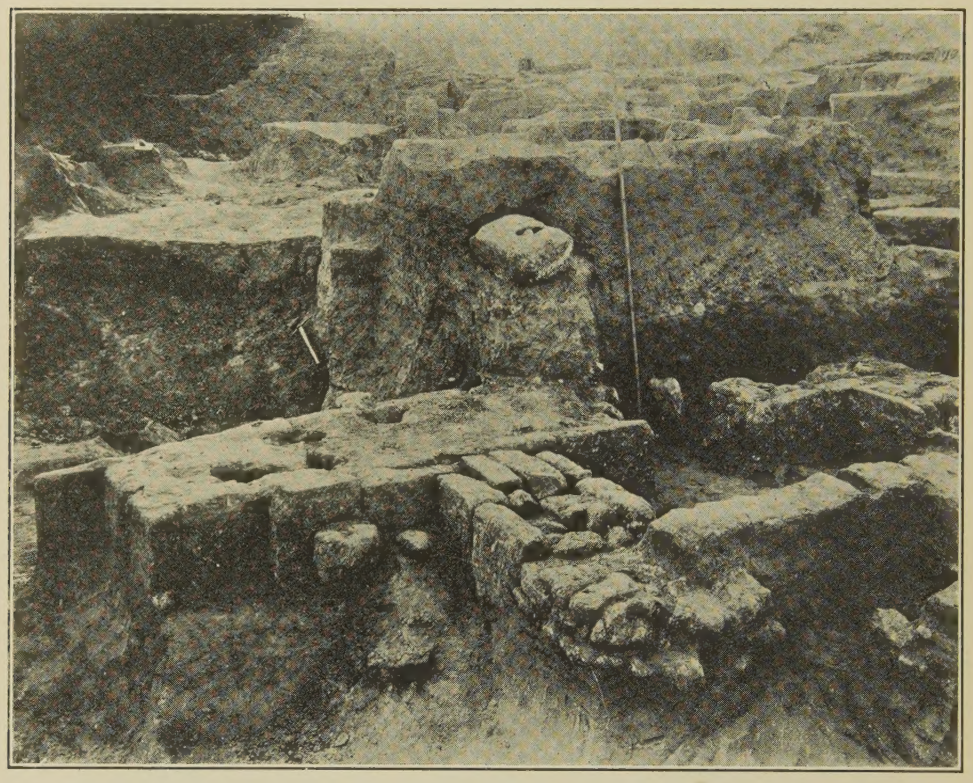


FIG. 3.—STONE BASEMENT OF THE FIRST PALACE.

of scattering in higher levels by digging holes, or in lower levels by objects falling into holes, had to be guarded against. As a test, I chose one class of very distinctive foreign pottery, the fork-handled bowl (Figs. 1, 2), which is of common occurrence. This is of two clearly separate qualities, the delicate fine ware and the cheaper imitation which succeeded it. The imitation begins at 980 inches over sea level, and the fine ware ends at 1,010 inches; it is therefore only through 30 inches that they are found together. Such an overlap would naturally occur during the interval when the original fine ware was becoming copied, and superseded by a cheaper variety. Of the three hundred fragments, not 5 per cent. indicated accidental scattering. This result gives confidence in the historic value of the various strata, as linked with the evidence of the building. Unfortunately, very few scarabs were found in the tell, and none giving a precise date. We have to depend on the evidence of pottery and of Hyksos custom.

Reviewing now the whole results of this season on the tell, it would appear that the oldest remains perhaps were the pit burials in what was later the courtyard of the palace region. These had some pottery which was quite unknown in the Hyksos period, yet all of it entirely different from that of the Copper Age of the VIth dynasty.

The earliest structure was the palace, No. 1, with stone basement (Fig. 3). Slabs of sandstone about 2 feet high were set on edge, half bedded in the ground, to support each face of the brick walls. The space between was packed with

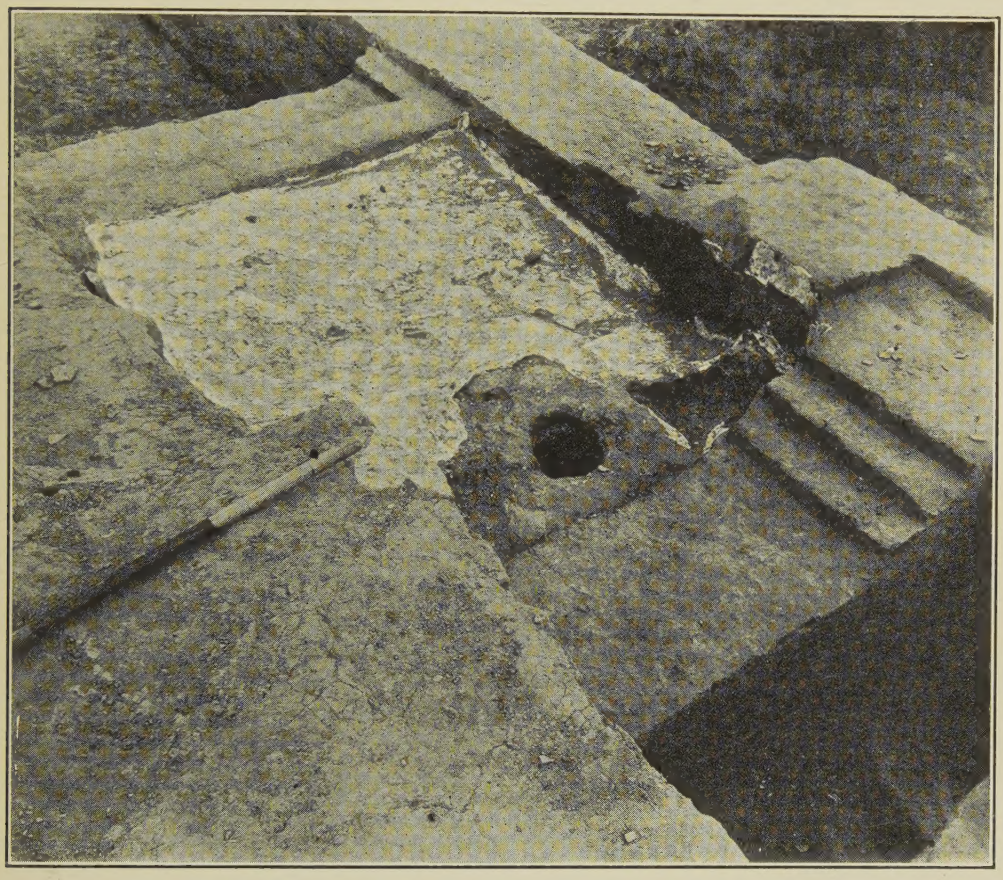


FIG. 4.—BATHROOM PLASTERED IN SECOND PALACE.

blocks, forming a basement about 6 feet wide for the foundation of the main walls, and 4 feet for interior walls flush with the edge of it. The stones formed a sort of wainscot to the wall about a foot high, visible above ground. The extent of the building is not yet fully known ; it was at least 125 feet long and 65 feet wide. It was one of the largest regular blocks of building known in Palestine. The complete plan cannot yet be reached without removing some of the thick walls of later buildings.

That it was a public building is evident from the scale on which it was planned, and it is almost certainly contemporary with the Great Fosse surrounding the hill (*Anc. Eg.*, 31, i.). The cutting of the fosse would provide the stocks of sandstone for the basement. This stone is only a sand dune bound together with gypsum. That this was a palace rather than a temple is shown by a large

bath chamber, 12 feet by 8 feet, paved and lined with white plaster, and having a privy at one side. The sloping floor drained to the outside of the palace. As no earlier pottery was found here, the age of it may perhaps be that of the North Syrian invaders who formed the VIIth and VIIIth dynasties in Egypt, 3000 B.C. This is indicated by the form of the fosse, the same as at Homs (Emesa).

All later buildings were on a decreasing scale of size. The great palace having perished in the flames, only a thick bed of ashes remained. The place was deserted for some centuries, the walls all washed away, and nearly 3 feet of detritus accumulated over the stone basement. Then there came a new people to build a palace (No. 2) on the site, and they entirely ignored the old

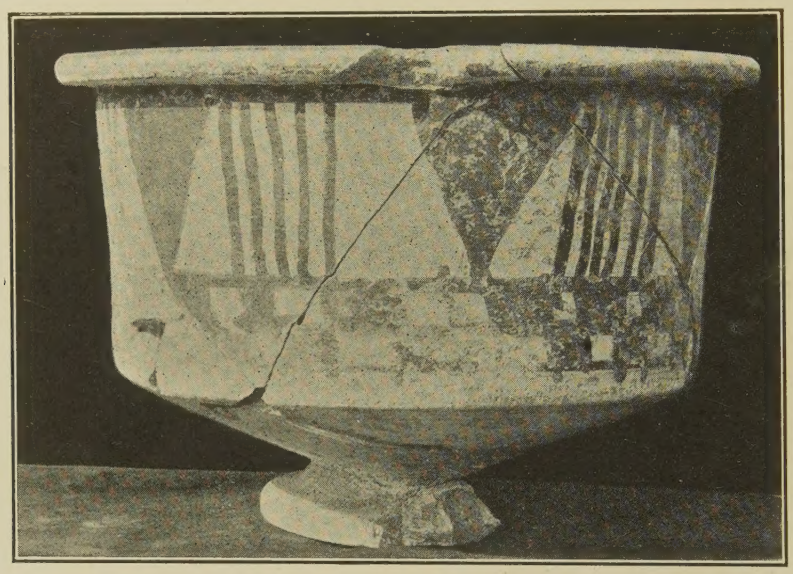


FIG. 5.—BOWL WITH WHITE AND CHOCOLATE PATTERN.

foundations. The lie of the ground made them build parallel to the old work: it was a block of yellowish clay brickwork, 65 feet by 40 feet over all. The unit of measure was the Northern foot of 13.16 inches, the base of our English land measures. The builders did remarkably regular work, and the bricks were so well made that later people took the walls to pieces, course by course, to build the next palace. The apparent stairway in the view (Fig. 4) is only the stepping of the courses of bricks where they have been regularly removed for re-use. The less massive walls of this palace make it less of a fortress, and imply a settled condition and more confident people. That this yellowish building was a palace is again shown by a large bathroom, white-plastered (Fig. 4), which drained to the outside, and had a built stone drain underground. There was also a privy. An ante-room contained storage for water, and a cobbled platform. So excellent were the bricks that the whole building was removed for later re-use, and only 2 feet of the foundations remain.

About this period there came the change in some of the painted ware imported from foreign countries. The fork-handled bowl, cited above, began with delicate lines on thin white pottery with red squares, and ended in a coarse imitation in drab, made in Cyprus. The design of a row of small squares with

cross-lines is known from Cappadocia, and so the source is probably Anatolian, and the frequency of examples shows how lively a trade flourished between the two countries. More has also been found of the black and bright red pottery with animal figures, which puzzled every expert last year at our Exhibition, but there is no light as to the source of it. The polished white pottery with chocolate-brown patterns has often been found, in small pieces, ranging over palaces 1 and 2 ; in the cemetery, loose in the earth, there was a fine bowl

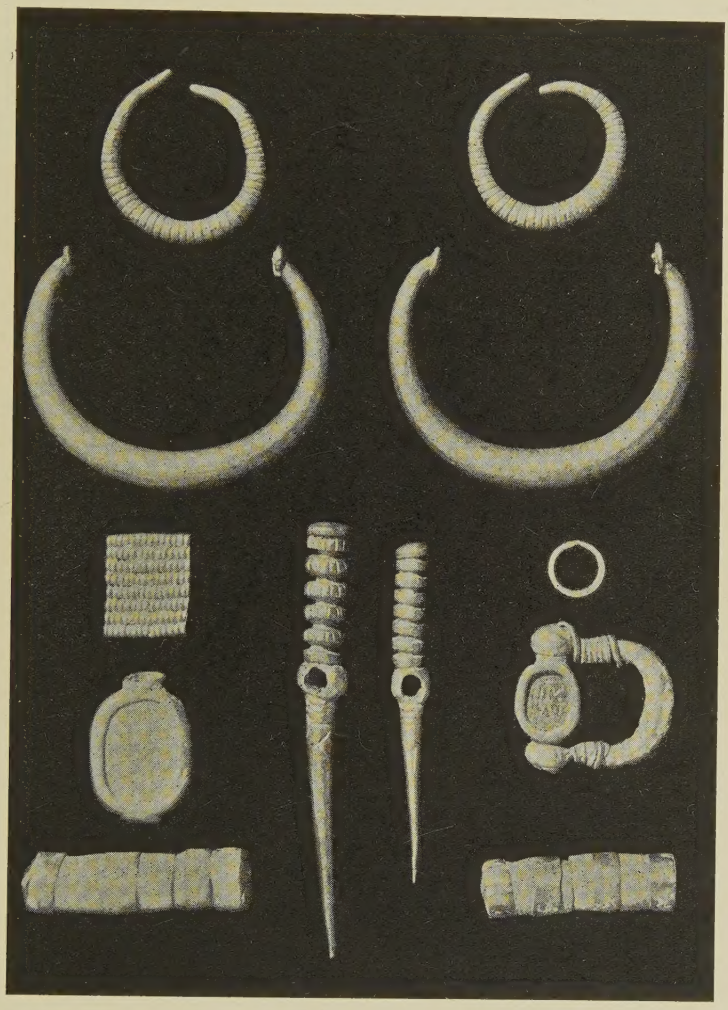


FIG. 6.—JEWELLERY FROM THE OFFERING PLACE.

(Fig. 5). The colouring and chequer pattern seem Anatolian, but there is no example of this ware yet in the Constantinople Museum. All the painted pottery was before 2000 B.C.

The destruction of the yellow brick palace was followed by the building of the black brick palace (No. 3) of more massive form, 87 feet by 30 feet. The new builders used the yellow bricks mingled with its dull grey-black, and followed on some of the internal foundations that went before, but in general the old plan was ignored. The much greater thickness of the walls implies a more unsettled condition. The west wall proved insecure, and it looks as though buttresses were added inside ; these in turn leaned in with the wall, and finally

a thick lining was built against it, and the interior level raised. The first building had no door or windows in the ground floor, yet the walls were plastered with lime, which covered also the buttresses. As one buttress has traces of a reveal which projects from it, an internal doorway is suggested, and it may be that the buttresses were original features, and later the tilt of the walls pushed them inward. The only trace of outer doorway lies 80–90 inches higher, and there is no sign of beam-holes or corbelling for a roof. Probably the original entrance wall was taken down and rebuilt when the higher level of the next period was arranged.

Another large building was erected to the north, and this was built under Egyptian influence, as it is exactly 50 cubits long. Less massive buildings adjoined it, but the purpose of these is not evident.

Fig. 7.—Pottery Figure of Hyksos Age.

About the Late Hyksos time, a curious place of offering was set up in front of the palace. An old paving of sea shells lay there over the ashes of the first palace, earth accumulated to 5 feet thick over it, and then a brick tower was built, about 15 feet square (see the block in Fig. 1 with measuring staff laid against it). In it was a chamber lined with rough stones and a rough stone floor. On this floor lay dedicated treasures: ten gold armlets, on the Egyptian *qedet* unit, numbered in two sets of five; two large ear-rings (Fig. 6); two ribbed ear-rings, and two toggle-pins; a lazuli scarab with a winged dog, perhaps Assyrian; a black jasper scarab in heavy gold ring, with mock-Egyptian figure of Horus with *onkh* and papyrus; and a spacer plaque for eight-string bracelet. At base of Fig. 6 are two cylinders of lazuli with gold bands which probably fitted into the large ear-rings as the carrying bar. All of this is personal jewellery. The source of the lazuli is eastern, and the subjects engraved are Mesopotamian and a Syrian copy from Egypt. Until more definite connections are forthcoming, we must be content to consider these as due to Hyksos trade. A few fragments of gold work were found beneath the floor of the chamber. The whole chamber was filled up with lumps of stone to about 3 feet deep. No such offering place is known before.

The palace No. 4 was on the walls of No. 3, but the occupants threw out additions on the west and the south. They raised the floor level about 5 feet,

took out the cross walls, and rebuilt them thicker. Some of the northern buildings survived into this period. For this reconstruction, a horse was buried as foundation sacrifice, after the shoulders had been removed for eating; two other horses were entirely cut up for food, and the bones scattered on the ground. Such a sacrifice is unlikely in an Egyptian ceremony, and it plainly belongs to

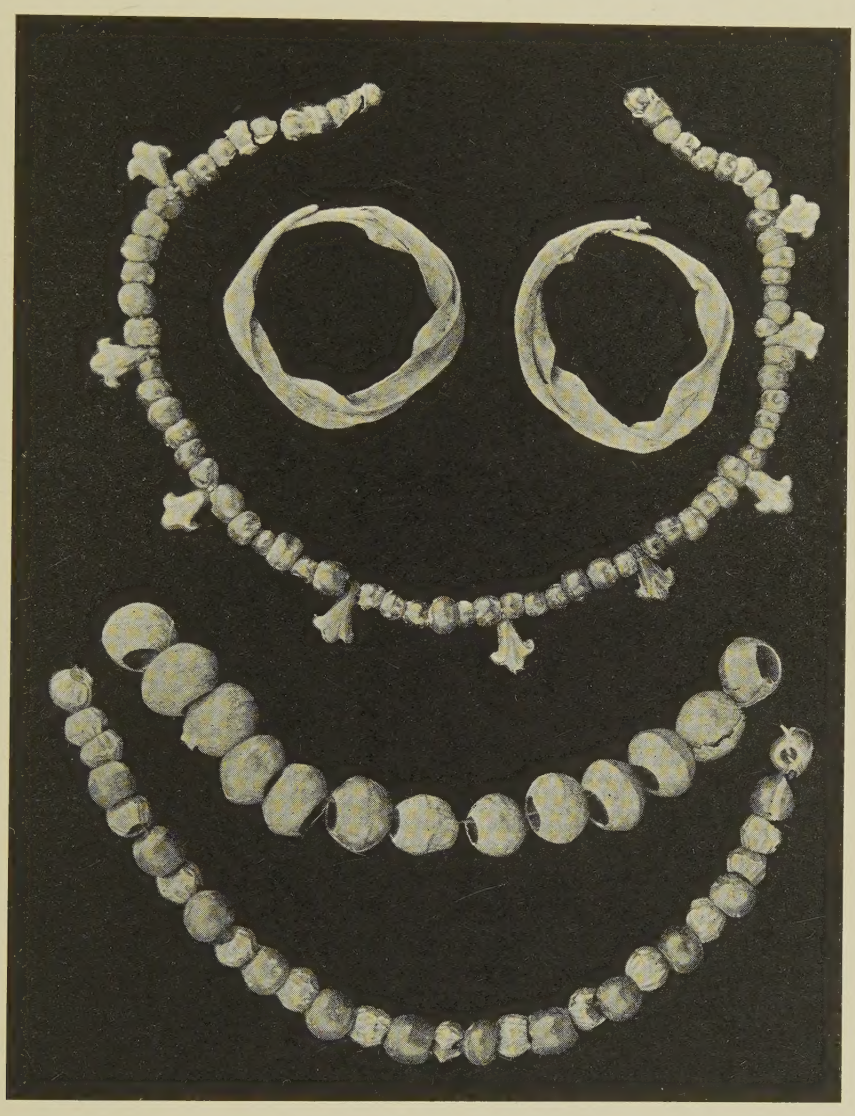


Fig. 8.—Ear-rings of Western Design, XVIII Dynasty.

the Hyksos, as the people who introduced the horse. Of the Late Hyksos age is the pottery head (Fig. 7) found in the tell. The sequence of buildings here points to this palace being built at the rise of the XVIth dynasty, and Palace 3 belonging to the XVth. Certainly the XVIIIth dynasty was above this level.

The scanty remains of the XVIIIth dynasty were the last buildings here. They may well have been, originally, more extensive, but they have been heavily denuded, and there is little to show of their construction.

Cemeteries on the plain below.—We had excavated one cemetery of the

Copper Age (3500 B.C.) in the previous season. This year we made soundings along the north and west sides of the tell, for any further cemetery of this period. At a furlong away on the west, we at last reached ground which had served the early inhabitants for a cemetery in a suitable stratum of marl. There were about fifty tombs with square shafts leading to shallow chambers, and in half of them were copper daggers in perfect condition. The largest was 16 inches long; most of them had a mid-rib with hollowed sides, some had blades ground flat, as thin as card, with a deep mid-ridge, and others were only convex on the sides.

A remarkable deposit, dating from perhaps a thousand years later, was found between the cemeteries. A great burning had been made; into it were thrown two of the finest basalt tripod stands (Fig. 11), an alabaster vase and slate dish, all smashed up, and a great quantity of gold and silver work which became mostly melted. To emphasize the destruction, all the gold plating had been

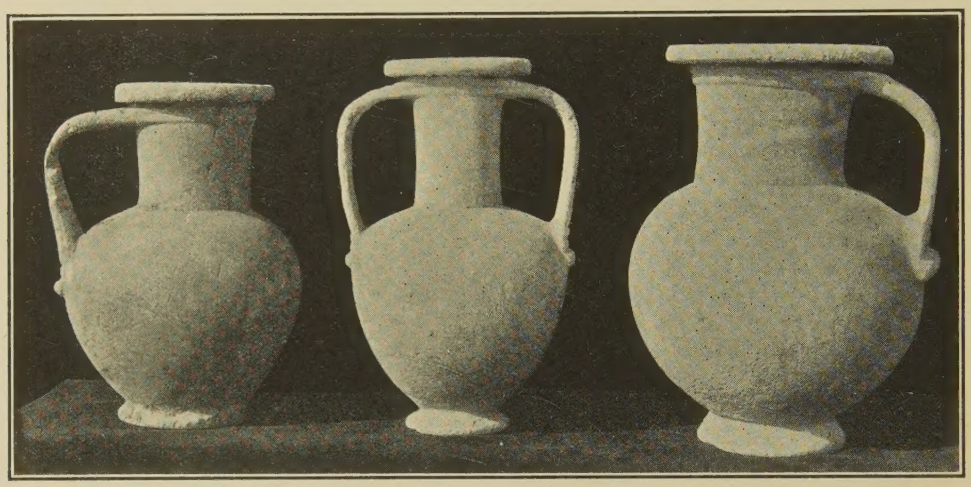


FIG. 9.—ALABASTER VASES, XVIII DYNASTY.

torn into the smallest fragments. The whole valuable property had been devoted to destruction, regardless of its value. It was neither a burial nor a hiding-place, nor loot, but the execution of vengeance on property which had to be annihilated for the common good. The parallel to the history of Achan (*Josh.* 7) is obvious; some man had brought ill-fortune to the community, and all that he had was accursed, and was to be ruthlessly destroyed. This expurgation was in such cases a Palestinian custom, then, which came into usage among the Israelites.

Many graves of the Hyksos period were found scattered in various parts, but they did not add much to our knowledge.

The XVIIIth dynasty cemetery was richer in objects. Some ear-rings (Fig. 8), with carnelian beads and gold lotus pendants, are of a type well known in the torques of Ireland and Gaul; the cross form of the section was made by bending two strips to a V groove and soldering the bands together, $\overset{V}{\wedge}$. The shape was ill suited to a curve. In the tombs there were also alabaster vases of the usual forms, some of which are in Fig. 9. The cemetery had in one part a border of shells (Fig. 10), which ran as a straight boundary for 100 feet. The overturned shells above it probably fell from a slope, on the left, owing to denudation. The whole area has been heavily denuded.

In the season which is just closing, we have gleaned as much history as we

were led to expect. We were in search of palaces and have found them. In many periods, 3500–1500 B.C., we have secured a large advance on last season, and the prize now awaiting us is the site of the temples. There we ought to find

FIG. 10.—SHRAL BORDER TO CEMETERY.

FIG. 11.—HARALE STAND, FOUND WITH "ACHAN" DEPOSIT.

the historical material for fixing better the period of each of the great palace buildings already brought to light.

Tell el Ajjūl, Gaza. FLINDERS PETRIE.

ANCIENT DEFENCES OF TELL EL AJJŪL.

THE defences of Tell el Ajjūl, the ancient Gaza, comprise at least four separate enclosures. Further excavations may reveal others.

The tell was protected on the south-west by the Wady Ghazzeh. Round the remaining three sides a ditch, the Great Fosse, was excavated anciently, and the earth thrown up on the face of the tell, to form a slope of about 35°. A section of the ditch has been cleared to a depth of about 20 feet, and it had a flat bottom. The counterscarp, or outer slope of the ditch, was found to be at a slope of about 4 in 1. The distance from the top of the counterscarp to the estimated top of the wall on the mound was 150 feet. From the top of the wall to the bottom of the ditch was probably about the same. At the given slope of 35°, this would make the level of the top of the bank 90 feet above the bottom of the ditch. The length of the ditch round the three sides of the tell is about $\frac{3}{4}$ mile.

There is reason to think there may have been an entrance on the west corner, now denuded away by the rains of 4,000 years. However this may be, it appears that the chief gate was on the north-east side, incidentally the weakest, owing to the nature of the surrounding country.

To north and south the tell overlooks and completely dominates the neighbourhood. This dominance is due to the height of the wall thrown up by excavation of the ditch. The probability is that originally the tell was only about 15 feet in height. For instance, the land a few hundred yards N.E. of the tell was 65 feet above sea-level, rising in one place to 77 feet. Inside the tell one level shows 80 feet only, and the stone base of one of the excavated buildings is only 78 feet. These figures can only be approximate, as the levels of the surface have altered in the course of time, but they give some idea of the position. Some parts of the thrown-up bank now exceed 100 feet above sea-level. To south and west the present level outside the tell does not exceed 50–55 feet. It will thus be seen that the site is chiefly indebted to artificial works for its undoubtedly strong position.

On the N.E. the ground is undulating. The sand had encroached and covered the old surface to a depth of several feet, and prior to this encroachment there had been denudation, probably of 6 or 8 feet, at a very early time. It is not easy to visualise, without a great deal more digging than has yet been possible, the surface as it must have appeared about 4,000 years ago.

One is probably not far wrong in suggesting that the ground in this direction would have offered a certain amount of cover to a besieging force. From the top of the tell to-day there is a good deal of dead ground in that sector, and an enclosed work beyond the city, to deny this ground to an enemy, would be a natural assumption. There have, in fact, been found traces of such a work, in this direction, about 500 feet from the gateway. It has peculiar features. Instead of excavating a ditch and throwing the excavated earth inwards to form a bank, it would appear that the defenders reversed the process. A deep pit was dug and the earth may have been thrown outwards to form the bank. Its disadvantages are obvious, but that is what appears to have been done.

The work was not more than 40 yards across; the great depth inside, therefore, would have given perfect protection from archery. There would appear to be no doubt that this was a self-contained outpost.

Some readers will remember that last year a tunnel was discovered leading from near the gateway to this pit or ditch.* This tunnel is about 4 feet broad and 5 feet high, and about 500 feet long. The excavations of the present season would seem to give an explanation of its purpose. Instead of its coming out into a fosse which was presumed to be outside some work, it is now fairly clear that it comes out right into this work, since this fosse turns out to be the interior of the work itself. Troops and supplies could therefore be rushed, in time of emergency, from the city to the outpost. As already stated, the object of this outpost, holding possibly a hundred men, would probably be to deny ground to an enemy and so prevent a surprise attack on the main position.

There is also a sunken road leading towards this pit from the direction of the tell. It starts from the level surface and gradually drops till it is about 6 feet down. At this point it runs parallel to the side of the pit. As it is 6–7 feet broad it was probably used for horses or donkeys with supplies. The very fact of the existence of such an inclined roadway supports the idea that the object of the deep pit was to give cover to animals. An ordinary ditch outside, with level ground inside, would give insufficient cover in such a small work, for animals. The defenders would, of course, man the bank, but it would be an awkward place to command. However there seems little doubt that it was a detached outpost.

A few hundred yards further north, *i.e.*, about 150 yards from the N.E. angle of the tell, is a similar pit. This is apparently about the same size as the other. It would appear to have served a similar purpose, *i.e.*, to hold an outpost. The lie of the land supports this view, but up to the present no tunnel has been found leading into the city.

In this connection it is interesting to note that a second tunnel has been discovered, running from the great fosse of the city at a lower level than that already described. It appears to run nearly parallel to it, and is probably a substitute for the higher tunnel which had in this part been washed away by denudation. One cannot help wondering whether it connects with this second pit. Both pits are about 500 feet from the main entrance to the city. One is connected by tunnel. Why not the other?

This N.E. work has various tombs cutting across its trenches, which in some parts were badly denuded away before the burials took place. For instance, XVIIIth dynasty pottery has been found in a tomb cutting a trench. Middle Hyksos pottery has also been found in a similar tomb, and that work is earlier, therefore, than Middle Hyksos. The pit outpost has yielded Early Hyksos pottery (2300 B.C.). The present opinion is that the tell fosse, the tunnel, and the pit outposts are all of the Copper Age (3500–3000 B.C.) or shortly after.

The northern trenched enclosure seems to be on rather a different footing. Its age is quite uncertain. As it includes within its perimeter the pit outpost, it is almost certainly subsequent to the latter. It cannot be later than Bronze Age, because in the time of the Hyksos Kings it had already been greatly denuded by rain, and was used then as a cemetery.

An entirely different system of trenches is to be found off the N.E. corner

* It ran between two cemeteries, and passed just outside the limits of the Copper Age tombs which lay to the south of it. North of it, the tombs were of the Bronze Age (Hyksos).

of the tell. These comprise an enclosure about 200 yards long by 70–120 yards broad. Owing to denudation, only about the last 18 inches of the trenches remain. Who used them, and why, is unknown. The second pit, above mentioned, is located within this enclosure, but the work is entirely different. Instead of an excavated pit with a curving but irregular outline, these appear to be ordinary trenches running in long straight lines. Their object may have been, like the two pits, to give added strength to the entrance of the city. The siting encourages this belief, since any attack on the entrance would find this long work 100 yards away on its flank.

West of the tell, the ground was searched for cemeteries of earlier periods, and that of the Copper Age was found. Up to the present, no copper implements beyond those tombs have been discovered at Tell el Ajjūl. As the people were buried here, they must have lived in the neighbourhood. At any rate, they appear to have put up good defensive works and were probably a powerful tribe.

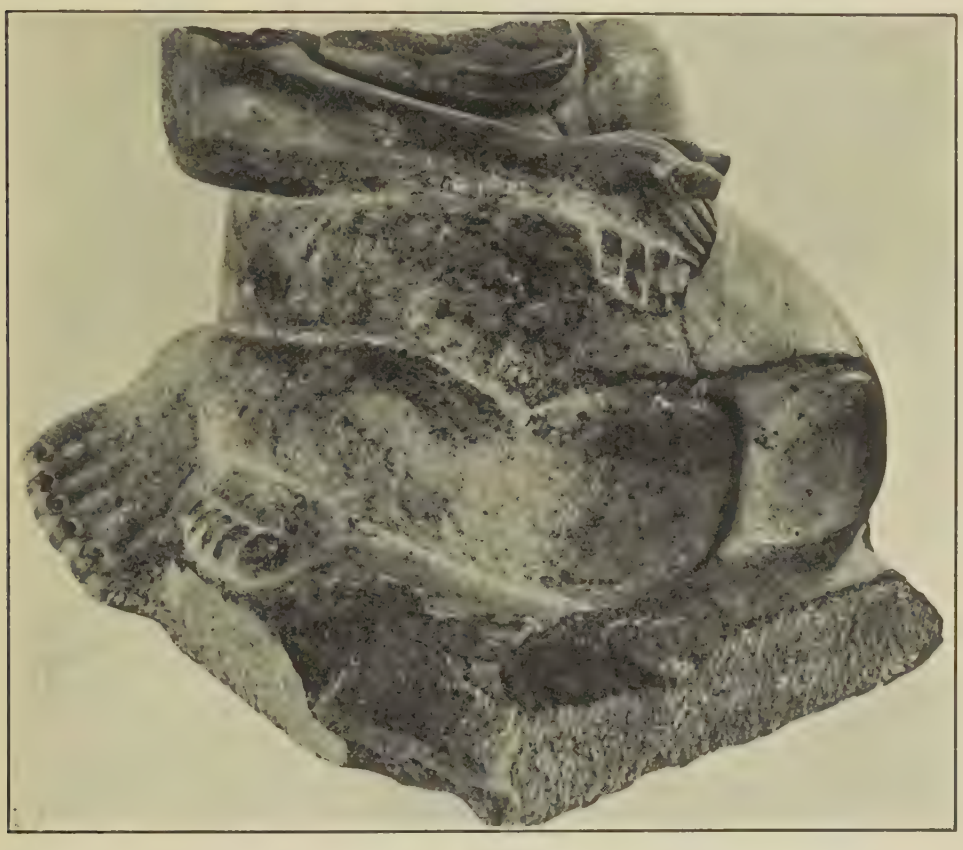
There is reason to believe that further digging may discover something more of the Copper Age people who put up these grand works—assuming they are the people who built them. The whole question is fascinating in its complexity.

N. P. Clarke, Lieut.-Colonel.

[The enclosure containing the second pit may have been a *zariba* for securing cattle, but this and many other matters as to these defences would need more research before conclusions could be reached.—Ed.]

STATUETTE OF PEPY FROM SAQQÂRA.

This statuette of black basalt, 0.19 m. high, was discovered at Saqqâra in 1907, and is registered in the *Journal d'Entrée* of the Cairo Museum as No. 39143. It is remarkable not only for the fine rendering of the clasped hands,* but in the position of the legs, which I believe is unique in Egyptian statuary. As will be seen in the photograph below, it was made to engage in a stand, probably



of wood, and it will be noted that the right toes project beyond the roughly cut base. At the back is a tapering pillar, bearing the inscription

Uab Hert Pepy Ar Ne Mutsent (Sentmut).

I find it very difficult to assign a date to this statuette. It may be Saitic (XXVIth), when aberrant forms are fairly common, but I should be more inclined to believe that it is of the First Intermediate period (VIIth–XIth). It is unlikely to be Middle Kingdom, since in that period the apron is wound round the body in the reverse direction to that of the statuette.†

R. Engelbach.

* An almost exactly similar treatment of the hands is seen in the kneeling scribe in the Cairo Museum, published by Borchardt, *Statuen und Statuetten* (Cat. Gén. du Musée du Caire), No. 119.

† Engelbach, *Annales du Service* XXIX., p. 32.

A TOWN IN OLD NUBIA.

On the east bank of the Nile, some fifteen miles north of Wadi Halfa, stands the deserted mud town of Sarra which, though full of interest, is almost unknown except to archæologists and to the native inhabitants of the neighbouring villages. Nor is Sarra alone in this respect, for there are other similar sites in Nubia, past which the tourists steam all unheeding. Perhaps the reason for this obscurity is not far to seek, for to the uninitiated there is here only a jumble of mud ruins that look insignificant to those who have seen the wonders of Karnak by moonlight or the colossi at Abu Simbel waked to life at sunrise. Until a few years ago even the archæologists viewed such a place with disdain, for the remains are mostly of the mediæval Christian period, and little merit was to be acquired by excavating a Coptic church. The broad outline of the history of such places as Sarra is quite a common one in this part of the Nile valley, but at the different sites the remains of one particular period often predominate.

From time immemorial the Nile has been one of the great African highways, and by the VIth Egyptian dynasty there was a considerable volume of trade passing between Egypt and the Sudan. Of this trade the various riverain tribes took what tax and toll they could, until they became so extortionate that much of the traffic was driven from the waterway and passed by caravan along such routes as the famous Forty Day Road in the unfrequented western desert. The strong kings of the XIIth dynasty, determined to suppress the brigandage of the river folk and to bring the trade back to the quicker and more convenient route, built a chain of fortresses, of which Sarra was one, between the first and third cataracts. In the vigorous days of the XVIIIth dynasty most of these fortresses were strengthened and enlarged, and in later times were in turn occupied by Ethiopians, Romans, Christian Nubians, and Turks, while a few of them were garrisoned even in Dervish days.

Sarra, during the XIIth dynasty, consisted principally of a rectangle of about 360 × 300 ft., enclosed by a strong mud wall. The site (Fig. 1) is on a natural platform of rock sloping upwards to the east, away from the river; the western side of the fort lies on the river's edge, and it slopes some sixty feet higher, so that from the opposite or western bank it is possible to look right into the fort. It is quite common to-day, on the Nile, to leave a site unlevelled before building so that, from the deck of a steamer, you can often look down into the courtyards of the houses. There is now nothing to prove whether the enclosure wall was continued along the river bank, or if the fort was exposed on this side. There remains, however, about seventy-five feet of stone pitching which clearly indicates an old quay or embankment, and perhaps the mud wall stood on this. A diligent search failed to reveal any remains of the covered staircase giving access to the river, which was a usual feature of the XIIth dynasty forts and ensured a water supply, even in times of siege, at all stages from flood to low Nile, and incidentally would serve also as a river gauge.

Outside the wall (Fig. 2), and parallel to it at a distance of a few yards, ran a ditch that was cut into the rock some twelve feet deep on the eastern side, while it tapered away to nothing at the water's edge and was about ten feet wide. This ditch would serve the same purpose as a moat, though it must have been always dry, for to have filled it by inflow from the river would have meant a

1. General View of Sarra.
2. The North Wall.
3. The North-East Corner.

depth of over sixty feet on the eastern side. The ditch is now in places choked with sand, but its course can still be followed quite easily, and the original mud wall, though nearly five thousand years old, is still standing, often to a height of twenty feet. In the middle of the ditch on the north side a gateway was cut; there may have been others on the east and south sides, but this is the only one of which there are now any traces.

The wall, which was built of mud bricks, or blocks rather (for the XIIth dynasty brick was very much larger than our modern brick), must have been a massive structure about thirty feet high and fifteen feet thick at the base. The bricks were not laid in horizontal courses, but followed the contour of the ground and, as the rock platform shelved up from the river at an angle of about 20°, the wall, on the north and south sides, looks as though it has experienced a severe landslide. In old Nubia there are several examples of these XIIth dynasty mud walls, and it is amazing that they should be still standing as, according to our standards, they were badly constructed. The single factor contributing to their preservation has been the extreme dryness of the climate for there has fallen hardly a drop of rain here since the days of the Pharaohs. The bricks were not bonded, as we understand the term, but were laid in a series of vertical laminations; this defect in design was corrected, to a certain extent, by sandwiching in grass mats through the thickness of the wall at every ten courses or so, and also by tying the bricks transversely with trunks of palm trees, the bricks being all stretchers and the palm trees and grass mats acting as headers. The sun-dried bricks, of Nile mud mixed with chopped straw, are to-day almost as good as when they were first made, but most of the palm-tree headers have been eaten away by white ants, which left little tunnels through the wall.

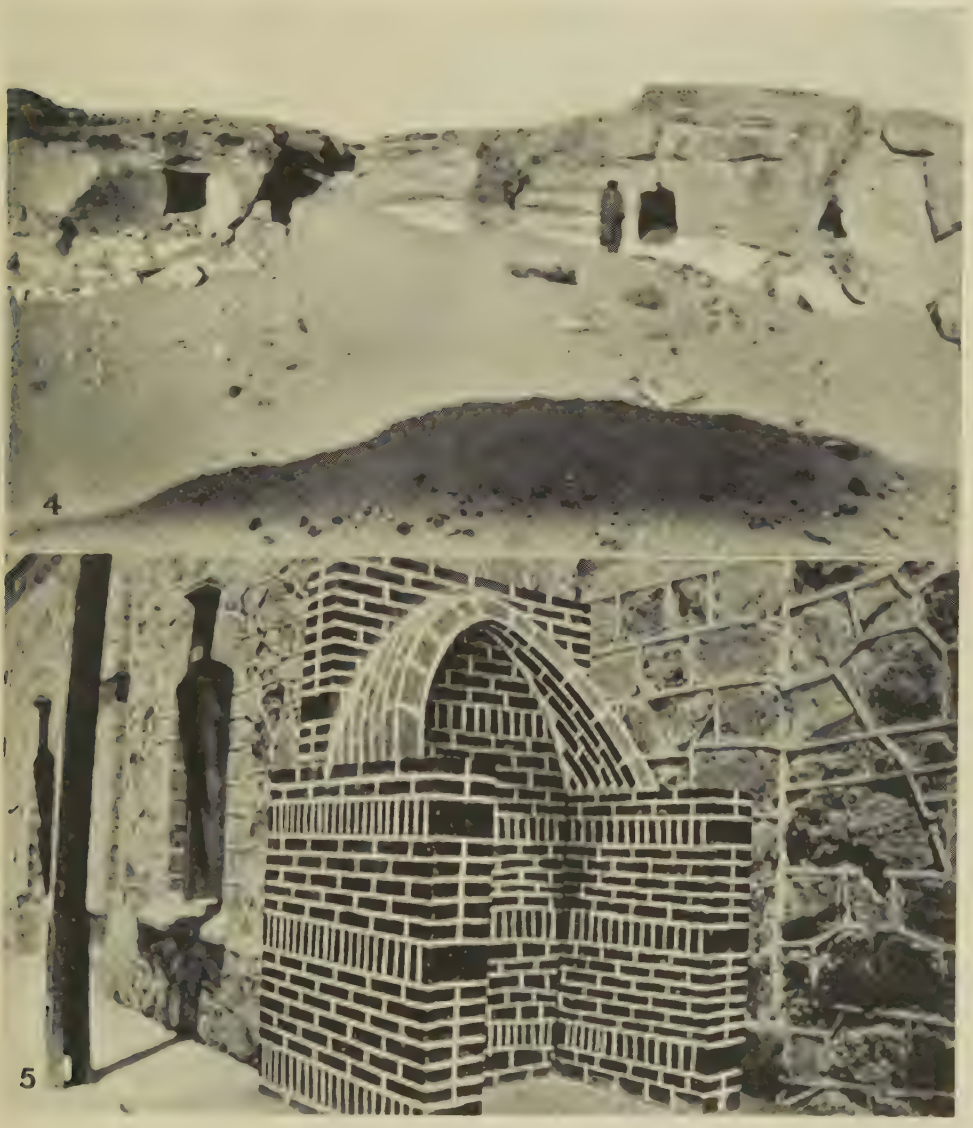
Inside such a fortress (Fig. 3) the principal buildings were the castle or governor's house, of mud brick and, particularly from the XVIIIth dynasty onwards, the temple built of stone. Substantial remains of what might well have been the governor's house are still standing in the north-east corner, but there are now no signs of an ancient Egyptian temple, though there can be very little doubt that there was one, as sculptured stones of dynasties XVIIth–XXth were used in building Christian tombs about two miles to the south, in the village of modern Sarra. Just across the river at Sarra West, as it is now called, a fine temple was built by Rameses II, but this was completely ruined before Christian times.

From the XVIIIth dynasty onwards, Sarra was occupied successively by Egyptian, Ethiopian, Meroitic, and perhaps Roman garrisons, but, except for the old wall and some of the houses, most of the remains are of the Christian period, sixth to sixteenth centuries.

Though missionaries from Alexandria penetrated the Sudan from the first century onwards, it was not until the middle of the sixth century that the country, from the First Cataract to Sennar on the Blue Nile, became Christian. From this time there were established, along the banks of the Nile, Christian colonies that were really ecclesiastical towns; Sarra is one of the few of which anything interesting remains.

The Christians, wherever possible, made full use of any available earlier material, and converted ancient temples to churches or chapels, and tombs to hermits' cells or anchorites' grottoes (Fig. 4); that is why we find a XIIth dynasty fortress forming the nucleus of one of their settlements. At Sarra they overflowed the original fortress, except on the river side, and three of the four churches are outside the old walls.

Christian architecture in this part of the world was, for several reasons, very crude and primitive, with the result that the remains are nearly always more interesting than imposing. In its early days in Egypt, Christianity was necessarily a hole-and-corner religion; its adherents were relentlessly persecuted and, in the towns, the churches were in insignificant corners of dark courtyards



4. The Anchorites' Grottoes.
5. Tilted Building of an Arch.

and back streets. The Christians could boast no architects or builders, and the quarries from which the stones for the great pagan temples were hewn all belonged to the Government, and were worked by slave or convict labour. Although later on, when Christianity was established as the State religion, imposing stone churches and monasteries were built here and there, yet in general the earlier mean style in mud brick persisted. One of the reasons was the warped mentality of the ecclesiastics themselves who, as often as not, were

fanatics who had fled southwards from the distractions of Egypt to the comparative calm of Nubia. A contemporary church chronicle relates how Father Pakhomius, an abbot of Upper Egypt in the fourth century, put his heart and sinews and soul into the building of a church to the glory of God. When it was finished he saw that it was good, but on reflection he hastened to pull down his beautiful little church on the grounds that its very beauty was a sinful lust of the flesh. In a life that should be given to the service of God, there was no place for admiration or even contemplation of the work of man.

At Sarra there are remains of four churches, known as the North, the Central, and the two South churches; of these, the Central church is the only one within the XIIth dynasty walls. The churches in Nubia conformed in the main to a common type, though there were sometimes minor modifications in detail. They were all of basilican, or dromic, plan, with a nave and two side aisles, and with an east end sanctuary or haikal that enclosed the altar. Out of more than a thousand churches there is only one known exception to this rule, that of a little church up the Second Cataract, which was square with a domed roof, just like a sheikh's tomb. Generally the churches had vaulted roofs in three spans, one vault over the nave and one over each aisle; not infrequently there was a central dome, or rather drum or lantern with domed top as well. Often over the aisles and west end there was a gallery, and the nave was then twice as lofty as usual; the western half of the south aisle would be sacrificed to make room for the staircase leading to the upper storey. Sometimes the churches were built wholly of bricks made of Nile mud mixed with chopped straw, and sometimes with the lower courses, to a height of eight feet or so, of rough stones, and finished as to the vaults and domes in mud brick. The method of constructing the mud vaults is interesting and has been used, particularly for covering tombs, from very early times. Instead of using, as we should, a wood centring for the arch, the end wall is built up rather higher than the finished roof and on this wall is marked, in mud mortar, the curve of the arch (Fig. 5). From each of the side walls, by two men working in conjunction, a brick or half a brick is then laid leaning against the end wall, inclined from the vertical about 20°, and also canted inwards sufficiently to keep it on the curve marked on the end wall. Against these initial bricks are laid successive courses starting alternately with a brick and half a brick, to break the joints, and all similarly inclined from the vertical and canted inwards until the work of the two builders meets in the middle of the end wall at the crown of the arch. Once the first complete ring of the arch is built, the rest is quite simple and any length of vaulted roof can be built by adding the required number of rings. The results are surprisingly good, though the whole is done solely by eye without any aid of squares, compasses, or even a string. Sometimes a plank or pole bridged the space between the side walls, and by standing on this it was possible to build an arch of greater span; otherwise the size was determined by how far a man could stretch from each side wall. As the ratio of the height of an arch to its span was generally about three to five, even a tall man could not roof a building that was more than twelve feet wide. It will be seen that vaults built by this method are necessarily aslant, in a series of laminations like a pack of cards that has been tilted.

Inside. the churches were invariably mud-plastered and white-washed, and the walls were covered with paintings of evangelists and saints or with prayers and texts. These paintings, which were in bright blue, green, red, and yellow, were sometimes very crude, and sometimes of a high standard;

whatever their merits, they were always striking and effective ; unfortunately, very few of them are still complete.

One of the most curious features of Nubian churches is their small size. One of the largest would hold fifty people ; the best example that survives, near Wadi Halfa, would have been filled to overflowing by a congregation of eight ! Perhaps in those days Christianity was esoteric, and while the initiated or communicants were allowed to attend the services in church the others had to listen as best they could outside. Except in the larger churches which were furnished with pulpits there were probably no regular services, and the churches were regarded more as chapels or shrines where prayers and thanksgivings could be offered at any hour. Perhaps the churches though small were also so numerous as to be able to accommodate everybody. A number of small churches in preference to a single large one seems to be a Byzantine feature and though, after the Arab conquest of Egypt in the seventh century when Nubia was cut off from Constantinople, the Byzantine tradition in this, as in other respects, persisted, it possibly indicates a monastic plan as opposed to parochial design. It must be remembered also that in those days they were inveterate and querulous hair-splitters ; if anyone with two or three followers wished to form a new school, it was a simple matter to build a new mud church. Still another explanation is that the Nubians were as poor as they were pious, and churches which were built and endowed by legacies were necessarily of a size determined by the amount available. It may also be argued that churches built entirely of mud, with vaults and domes, must always be small.

The four churches at Sarra are all of them domed, and are built throughout of mud brick. The North church (Fig. 6), just outside the old fort on the north side, is the most conspicuous, for it is built on a platform of rock. From the outside it appears to be in a good state of preservation, as vaults and dome are still intact, but inside most of the plaster has flaked off the walls and the paintings have disappeared ; here and there, notably on the soffits of the arches dividing the aisles from the nave, there remain fragments of heads and haloes. The nave and aisles are each 10×5 feet, and the church would hold about twenty-five or thirty people. The sanctuary or haikal, sacred to the chief priest, is a prolongation of the nave, and the aisles being similarly extended form a sacristy on either side ; these are connected with the haikal by archways through which a full-grown man can just squeeze.

The Central church (Fig. 7) in the middle of the old town is, as regards plan and condition, the same as the North church except that it had galleries over the aisles and west end. The vaulted roofs of the aisles are 7–8 feet high, but the central nave is comparatively lofty, being about 20 feet to the top of the dome. The South church, just outside the south wall of the old fortress, is really a block of two churches, but here all the vaults and domes have collapsed. Nevertheless one of these southern churches can boast a very interesting feature not possessed by the other three, in that its altar is still intact. This altar is a solid cube of mud, 3 feet high, out of the back of which are scooped two niches like aumbries which no doubt held the sacred elements, the two cavities perhaps indicating a double dedication to two saints.

To the east of the South church, and about 300 feet from the south-east corner of the old wall, is a group of shaft graves sunk into the solid rock to a depth of 12–15 feet, each shaft giving entrance at the bottom to one or more rock chambers. The Christians were known to hew graves out of the solid rock for their more important burials, but these shafts and tombs were cut by

the ancient Egyptians; when they were explored, twenty years ago, it was found that they had been used for secondary, and even tertiary, interments, for in them were found canopic jars of the XVIIIth dynasty, Meroitic pottery, and Christian lamps and beads. Perhaps they had a further history and were cut by the XIIth dynasty founders of Sarra. Some of the shafts look like modern graves and would take a coffin horizontally, others are square, or round, like well shafts; into these the body must have been lowered head or feet first, and footholds are cut in the sides of the shaft. Sometimes, in tunnelling, entrance was made inadvertently into an existing tomb, for when, a year or so ago, a small native boy was put into one shaft he next appeared at the mouth of another. In Christian times the mouths of the shafts were covered with mud-brick vaults, in shape just like family vaults in any present-day cemetery, but most of these vaults have fallen in long since. On the rocks round about the shaft graves a few graffiti in Arabic are to be seen, but they are of no importance,

In the midst of these graves is a sheikh's tomb some fifty or sixty years old, the burial place of a holy man named Sheykh en Nur or Saint Light, for such was his sanctity that he gave out a phosphorescent glow! Strangely enough, when the inhabitants of the Mohammedan village of modern Sarra, two miles to the south, make their pilgrimages or sacrifices on such occasions as births, marriages, and deaths, they do not go to the tomb of Sheykh en Nur but to a spot just below the Central church in old Sarra. No doubt there is in this an unconscious persistence of Christian tradition, for Nubia was Christian for a thousand years and has been Mohammedan for only four centuries.

The traveller Burckhardt, who followed the banks of the Nile as far as Dongola just over a hundred years ago, wrote of Sarra: "... the ruins of a small Arab town close to the water, enclosed by a thick brick wall. After the promulgation of the Mohammedan creed the greater part of the Christian inhabitants of Nubia having either fled or been killed, a few embraced the religion of the invaders and their descendants may yet be distinguished at Sarra." From the Arab conquest of Egypt in 641 the Moslems repeatedly attacked Nubia, yet the tide of victory ebbed and flowed and the Nubians just as frequently took the offensive against Egypt. Though the Moslem invasion of Nubia in 1287 dealt a particularly severe blow to Christianity, nevertheless, when the main expedition retired to Egypt, the Christians were sufficiently strong to rise and drive out the garrisons left behind. The last Christian king who had any serious claim to paramount power was gathered to his fathers in the fourteenth century; the next hundred years saw Islam supplanting Christianity, yet the older faith did not finally succumb until 1517, when Nubia was squeezed out between the Turks from the north and the Fungs from the south. From the sixteenth century Nubia has been Mohammedan, and old Sarra has been abandoned, for the Sarra churches were never converted to mosques as sometimes happened. There is nothing peculiar in the customs, appearance, or speech, of the inhabitants of modern Sarra. There are here no rosy-cheeked, fair-haired, blue-eyed children as there are in Palestine. Miss Edwards in "A Thousand Miles up the Nile" (p. 356, 2nd edition, Routledge, 1888), writes: "... At Ibrim as at Derr (about sixty-five miles north of Sarra) there are 'fair' families, whose hideous light hair and blue eyes (grafted on brown-black skins) date back to Bosnian forefathers of 360 years ago." We have seen an albino in Halfa and another in the Red Sea province, but a diligent search in the villages of lower Nubia has, so far, failed to discover man, woman, or child, with fair hair and blue eyes. Inquiry from one "oldest inhabitant"

elicited the question: "Did you say red hair and blue eyes or blue hair and red eyes"? It is only fair to add that a few years ago there was employed in the Wadi Halfa dockyard a native sailor from these parts who had red hair, but no one remembers the colour of his eyes. Such was his physique that he was nicknamed Abu Simbel!

6. The North Church.
7. The Central Church.

Just south of the shaft graves, and running east and west down to the river, is a narrow rocky *khor* or defile in the sides of which are hewn a few small chambers. These were hermits' cells, and were occupied by monks who wished for greater privacy than was afforded in the town. They did not care to be too far away from the river on which depended their food and drink, or from a place of refuge in time of danger. They are but mean habitations, mere burrows, when compared with the ancient Egyptian rock graves and memorial

niches at Faras, five miles north, which were converted to a similar use. There the walls were covered with prayers and texts painted in Greek and Coptic. To the north of the walled enclosure there is a similar but narrower *khor*, but here there are no traces of anchorites' grottoes. It seems curious that anyone should have gone to the trouble of cutting a ditch, surrounding the old fort, out of the solid rock when these natural trenches could have been made to serve the same purpose with much less labour. Probably these formed the first line of defence, and this supposition would bring the ancient Egyptian cemetery outside the fort and yet still protected, between the inner and outer fosses.

Inside the XIIth dynasty walls and surrounding the Central church is a jumble of ruined mud buildings. Some of these are of the same period as the walls, and one of them is so imposing that it might well have been the governor's house or castle. Others are of Christian times, and many seem to have been of basilican plan with vaulted roofs, so that perhaps there were originally more than four churches. Others were built half under and half above ground, being cut in the rock platform; the rock shelved upwards to the east, and the mud superstructure has fallen in.

When Sarra was excavated twenty years ago, no discoveries that are generally associated with Egyptian excavation were made. Apart from the material from the shaft graves, there were no finds of intrinsic worth. The churches yielded only a bronze cross, a piece of leather book-binding, a fragment of parchment on which were a few Greek letters, and a pair of iron tweezers with two iron skewers hung on a ring. In one of the churches was found a ponderous red granite block, $4 \times 3 \times 2$ feet, hollowed out on one side as a shallow trough about 4 inches deep. It is thought that this block, which is devoid of inscription, was originally a votive table in an Egyptian temple, no doubt in one of the temples at Sarra East or Sarra West. It was adapted by the Christians for use as an altar or as a stoup for holy water, and is to-day a font in the English church, or rather just outside the church door, at Wadi Halfa. It seems strange that a Christian church should boast a font that is more than three thousand years old. Though not discovered there in 1912 when the site was excavated, the most important of the Nubian Christian manuscripts that survive seem to have come from Sarra. These were not all necessarily written at Sarra, and some of them were taken there for safety from Edfu during the severe persecutions in Egypt of the early eleventh century. Frequent visits to Sarra in the course of the past year have rewarded us with many fragments of good pottery, a piece of a black marble bowl, a stone pounder or muller, and a few beads. The pounder might be of any age, as such implements are common to all periods from dynastic times to the present day. The pottery was all Christian, and mostly of the usual shades of red with varying patterns in black; one piece was light terra cotta in colour, and ornamented with Coptic crosses in black.

As far as we know, the suggestion has never been made that Sarra was a monastic settlement, though there are many good reasons for thinking that such was the case. Although very little is known of the plan of a monastery in Nubia, there is no doubt that a monastic settlement comprised essentially a self-contained and self-supporting community within a walled enclosure, the wall serving partly as a defence and partly as the means of religious seclusion. In addition to the monastery, which might have been a single church or might have included a parent church with dependent chapels, there were all the necessaries for a cenobitic establishment. There were houses of which one was often much stronger than the others, and served as a keep or inner defence;

a garden for vegetables, fruit trees, and vines, for even in Nubia the monks had a pretty taste in wines and liqueurs; corn and oil mills, no doubt like those we see all over the east to-day; a pigeon loft or dovecote, and perhaps beehives as well; accommodation for cattle that, then as now, would go out to graze during the day and come home in the evening; generally a well, though not necessarily so, if the settlement were on the river bank; and, moreover, a refectory, kitchens, and workshops. It might seem that all this would take up a large amount of room, but it must be remembered that everything was on the smallest scale, and the Nubians have always had a genius for compressing the maximum of life and property into the smallest possible space.

There is no reason why all these monastic requirements could not have been fulfilled at Sarra; on the contrary, everything indicates that they were. In the north-east corner, where we previously located the governor's house, the keep would stand; with the monastery along the south wall where the ruins are still two and even three storeys high, and the area surrounding the central church crowded with a complex of buildings. There was still room for cultivation to a depth of 200 feet to the river bank. It is reasonable to suppose that the hermits would have taken up their abode close to a monastic settlement, rather than just outside a town. Had Sarra been an ordinary Nubian parish, we should have expected to find a font in at least one of the churches, nor does the finding of beads necessarily argue the presence of women, for they might well have been rosaries. Even if we admit the women they could have been nuns for there were, in the Nile valley, convents as well as monasteries. The parish of Sarra East was no doubt a mile or so to the south, where there is still standing the ruin of a church much larger than any of those at old Sarra.

In the absence of inscriptions, it is difficult to say with any degree of certainty when, or for how long, Sarra was occupied by the Christians. The earliest Christian find in the neighbourhood was a painted wooden panel from a church at Halfa attributed to the seventh century, while the latest was the tombstone of a priest from Faras, five miles to the north, dated 1181. At Faras there are Christian inscriptions from the eighth century, and in Debeira church, between Sarra and Halfa, was found the tombstone of Peter the Deacon, dated 1029, while the latest Christian monument in all Nubia is a Greek tombstone mentioned by Junker and dated 1248. It is generally agreed that most of the Christian remains in the locality are of about the ninth, tenth, and eleventh centuries, and no doubt Christian Sarra belongs principally to this period, though it may have been occupied right down to the Turkish conquest in the early sixteenth century. Perhaps, later on, a closer study of Christian pottery will enable us to date such places more exactly.

J. H. Dunbar.

Bibliographical Note.

Annals of Archæol. and Anthrop. Liverpool Univ. Press. Vol. VIII, pp. 97–101, with two plates xxii, xxix. Vol. XIV, pp. 98–101, with four plates lxxvi–lxxix. See also Vol. XIII, pp. 18, 55–56.

Churches in Lower Nubia. By G. S. Mileham. Edited by D. Randall-MacIver. Vol. II of Eckley B. Coxe, Jun. Exped. to Nubia. Univ. of Pennsylvania. 1910. Pp. 40–47, with 8 plates 29–36.

Christian Antiq. in the Nile Valley. By Somers Clarke. Clarendon Press, Oxford. 1912. Pp. 62–66, with 8 drawings.

Ancient Egyptian Masonry. By Somers Clarke and R. Engelbach. Oxford Univ. Press. 1930. Chap. XIX—Brickwork.

Travels in Nubia. By J. L. Burckhardt. John Murray. 1819. Pp. 40, 133.

The Nubian Texts of the Christian Period. By F. L. Griffith. Pub. from Berlin. 1913. Pp. 4, 5.

For an account of Christianity in Nubia, see also *A History of the Arabs in the Sudan.* By H. A. Macmichael. Univ. Press, Camb. 1922. Vol. I, pp. 26, 40, 48, 169, 177, 181–8.

NOTE.—Sarra is variously spelt Sarra, Serra, Serreh, Sarrah, and Serre. (Its Egyptian name was Tehekhti.)

REVIEWS.

History of Palestine and Syria. By A. T. Olmstead. 8vo. 664 pp., 187 figs., 18 maps and plans. 1931. 30*s.* (Scribner's.)

The history of Palestine is so largely linked with personal feelings that any writer on it is certain to view it from an individual standpoint. There is around us equally forcible belief and disbelief in the value of documents, an immense mass of criticism in every stage, and the whole of it coloured individually. The position of any writer on the subject sets the standard by which his judgment must be appraised. Prof. Olmstead was, naturally, trained in the critical canons of the German school, and thus is committed to various assumptions. But he has the critical insight to assert the contemporary value of the " core " of the books of Samuel, of the detailed history of David's life, the decrees of Darius, the book of Esther, and the additional details of the Chronicles. Thus he carries much weight as having in many cases an independent judgment.

The Assyrian side of the history is, naturally, the most fully treated. Assyrian history is taken as a basis, and the declarations of the prophets are each placed in their historic position, influencing the political relations with foreign powers which threatened Israel. This is a great gain for understanding the religious value of the prophetic writings to the actual life of the people. It places the characters of those troubled times on the true footing that they were " men of like passions with ourselves," and not abstract historical puppets, or emblematic expressions. All the discoveries of Syrian monuments are illustrated and brought in as contemporary records ; thus we have for the first time a real history of Jewish times, not only viewed from the didactic standpoint.

On the other hand, the treatment of Egyptian influence on the early history is much less judicious. The Genesis narratives are almost ignored historically. Of Exodus we read " perhaps the Hebrew stories retain faint recollections of the Hyksos Empire." There is no sense of the strong Egypticity of the early narratives, which fit the Egyptian and Hyksos habits and outlook at every turn. The organisation of the Hebrews, the Hebrew officials who ganged the workers, and who must have kept regular lists and accounts, the position under the Egyptians, show that there was a business-like record kept up, which was edited later in Exodus, when the detail was partly forgotten. Yet all this is entirely ignored in this history—the one plate of imitations of Egyptian scarabs is upside down. The intensely personal history of Moses is represented as first appearing in the reign of Asa, and the tribes are taken as being scattered settlers long before any Exodus. Yet the oppression in Egypt is accepted, on the basis of only the 70 men entering Egypt, and these " survivals of the older tradition make it plain that but a single tribe was ever in Goshen." He admits that Moses was the leader of the Exodus, and suggests that only Levi was in Egypt. The other tribes are supposed to have been largely mixed with previous peoples, and to have been settled before the Exodus. A very different view would result from more acquaintance with the Egyptian influences and connections. No mention is made of the excellent studies of the late Harold Wiener, and his

interpretation of the Israel stele as referring to the advance of Israel at the Exodus, and its repulse by Egyptian troops and allies of South Palestine.

The turmoil of the revolt of Syria against Akhenaten is fully traced from the Amarna letters. The position adopted is that the name of Habiru, or Khabiri, was a general appelation of nomad, bandit, or mercenary, and was applied in Canaan to the Israelites, who were hence called Hebrews. Thus the old term is brought in to identify the Habiru of Palestine in the Amarna letters with the Israelite invasion. Now this implies that the Exodus took place early in the reign of Amenhetep III, or even under Tehutmes IV. At that time the powerful condition of Egypt, and the hold on Sinai and Palestine, makes the escape of a tribe of slave workers a very unlikely event. The whole period must be viewed from the Egyptian side, and not only as a Canaanite affair. Moreover, the term Habiru may equally well have been applied to the Israelite invaders after the reign of Ramessu III.

Whatever views may be taken, this book will be essential to students, and therefore it is needful to point out details which might be misleading. On p. 57 Netia, or Nedaă, conquered in the Vth dynasty, is referred to Lud, whereas there were then heavy fortifications defending South Palestine from Egypt. It is more probably the Anitha of Greek times, marking an advance up east of the Dead Sea where the country was less strongly defended.

P. 82. The *ashera* was not a bare pole, but a tree, as shown in the many classical scenes of the tree and pillar (*Anc. Eg.*, 1928, 42), and illustrated by the present adoration of sacred trees in Palestine.

P. 89. Sekmem is certainly Shechem, the dual referring to the two shoulders of Ebal and Gerizim.

P. 95. The Khepesh was not a sceptre, but a weapon. Authority should be quoted for obsidian in Nubia, which is a strange statement.

P. 98. No enamel scarabs are known till Greek times. The early ones were glazed.

P. 120. Tell el Yehudiyeh (which is described but not named) is not in the Wady Tumilat or Goshen, but thirty miles away in the Eastern Delta.

P. 128. There is no ground for assigning Tanis to the Hyksos. The whole place was probably founded by Ramessu II, who brought statues from the cities in the south.

P. 129. For Cumæ read Cusae.

P. 147. Egypt was not the source of glass making; glass was imported occasionally for thousands of years before it was commonly used. Bronze casting hollow, by the wax process, is as early as the IInd dynasty, and is not a lost art, but is still in use. Linen was in common use from the Ist dynasty, and not merely in the XVIIIth.

P. 238. The text shows that gold was worth only *half* as much as silver.

P. 240. The lotus is not reversed, but correctly in pendant position.

P. 267. The Krethi are not "bracketed with the Philistines," but with the Pelethite Arabs.

P. 316. The comb pick is commonly only a mark of Graeco-Roman work; any earlier example should be verified.

P. 340. Solomon was the brother-in-law, not son-in-law, of Shishak, by the relative dates.

P. 404. Sibu was not a Delta king, but the well-known Shabaka (omitting the article *ka*), who conquered the Delta.

P. 628–9. The proverbs of Amenemapt were probably copied from the

Jewish proverbs, according to the latest view of the date estimated by grammatical detail (*Anc. Eg.*, 1931, 94).

In the titles of the frontispiece and of plans 13 and 14 statements are definitely made which are not warranted by the original publications.

The work as a whole is very welcome, and with some revision of the Egyptian side of the history, in the light of facts and not outside theories of criticism, it would long remain a standard work of reference.

Osiris: A Study in Mysteries and Religion. By HAROLD P. COOK. 8vo. 165 pp. 1931. 5*s*. (Daniel Co.)

This study is devoted to the ideas of Plutarch and his age, in the latest stage of Egyptian religion; as the author says: "the version which Plutarch records was, beyond doubt, the work of the priests or of late, and perhaps Greek, astronomers." Accordingly much of this book is based on the signs of the zodiac which are Babylonian, and were unknown in the Egyptian mythology. The dominant iconography of the heavens to the Egyptians was that of the immense figures of Nekht the strong one and Taurt the great one, each of which spread over half the sphere. To deal with the native astronomy we must attend to them, and not to a zodiac. Many quotations are made from an esoteric American work, Yarker's *Arcane Schools*, which fortunately is not familiar in England, as it is usually incorrect.

The author presses the position of Osiris as a Sun-god, though there is nothing definite for that, except the 365 lights at the procession of Osiris. The Corn-god view is rejected, but the strong evidences of that are (1) the cloth with a figure of Osiris, from which there sprouted ears of corn before burial in the tomb; (2) the figure of Osiris with vegetation sprouting around him; and (3) the modelled figures of Osiris containing grains of corn. As Osiris introduced agriculture, the origin of his worship must go back to the earliest corn-growing, in the Badarian age; the source is strongly indicated as from the Caucasus, by the Book of the Dead and the mythology (*Anc. Eg.*, 1924, 123; 1926, 31).

The main attraction to the author is the nature and meaning of the Mysteries. Other subjects pondered are Serapis, the Josephus version of the account of Joseph and Moses, the five epagomenal days, Eleusinian mysteries, the song Maneros, Dionysios and Osiris, Meroe as the source of civilisation, and the Chronology.

The Life and Times of Marc Antony. By ARTHUR WEIGALL. 8vo. 429 pp., 8 pls. 1931. 21*s*. (T. Butterworth.)

After Mr. Weigall's "Cleopatra" the correlative Antony was almost bound to follow. In this volume the "might have been" imagination is kept in check by the abundance of details, which have been gathered from over a dozen historians, and put into order to form a full narrative. The stage is widely set, covering a century, and displaying the rise of Socialism under the Gracchi to the completion of autocracy by the astute Augustus. All the phases of sentimental humanitarianism, blind experiment, unlooked for cataclysms, reaction, clashing classes, and final rest in the accepted haven of despotism, are what we are familiar with in 1790 or 1848—this is the natural history of democracy. It is here recited in terms which hint at recent experiments nearer home. The great difference between the Roman and the modern life is in the length and violence of the misery. Instead of a Terror of some months in France, Rome had wholesale slaughter by alternate parties going on for fifty years.

All of this recital is built here around the personal interest in a principal actor, Marcus Antonius. We hear almost too much about the brawn and bluster of this splendid animal, and about the contrast of the sallow-faced, pimply Octavian; such labelling is the trick of the "sea-green incorruptible" which bored our grandfathers. All of Antony's jolly good fellowship in drink and squandering, was of no avail against the brain of the sickly Octavian, who always seemed the weaker in command, in popularity, and in chances, but always came out the stronger in results.

What was the net value of Antony in the turmoil of events? Destruction of the wealth of the civilisations which he mastered was his usual result; for construction he had no ability. He could save an immediate crisis by ready wits, but had no vision beyond obvious things at hand. His dream of an Asiatic empire needed much more foresight than lay in his wine-soaked brain. He could not compare at any point with the constructive power of Caesar. This character is true to the descent of his family from Herakles, whose strength was not matched by his brain; see the Aristophanic scene of his being told that he could not be registered as a true Athenian.

Beyond the sheer bloodiness of the age, the worst feature was the prostitution of marriage to gain political values. Great bargains were usually sealed by the parties divorcing their wives and taking the daughters of the opposite sides as political pledges—only to be changed again next time a deal was in hand. Augustus continued the system, and he thus ruined the character of Tiberius, who never cared for life after being torn from his chosen wife to be tied to the depraved Julia.

Altogether, as a picture of the inner forces of a great world crisis seen at close quarters, this work may well stand as a lesson and warning in social politics, and Mr. Weigall is to be congratulated on his rendering such a period in a form which will prove attractive to readers.

JOURNALS.

Palestine Exploration Fund. Quarterly Statement, Jan., 1931.—ROWE, ALAN, and PÈRE VINCENT.—*Restoration of Sanctuaries at Beth Shan.*—This gives restoration of plans of the temple of Tahutmes III, Amenhetep III, Sety I, and Rameses II. The outline plan remained on the same lines down to Sety I, and a considerable change with addition of a large pylon, at right angles to the temple, is due to Rameses II. This is surprising, as it takes the plan with little change from Amenhetep III to Sety I, across the whole wreck and re-conquest of the great revolt. The earlier temple was destroyed, but Sety—true to his policy of exact restoration—rebuilt on the same lines.

April, 1931.—FITZGERALD, G. M.—*Excavations at Beth-shan,* 1930.—The cemetery was cut in very soft limestone, which largely collapsed. One tomb contained "flat-bottomed jars with ledge handles," evidently like those in the earliest cemetery of Tell Ajjūl. Burials of the Iron Age were intruded, in slipper coffins with headpieces. More works on the hill adjoined the previous clearance of the temples. A large lintel of limestone has a figure of Ramessu-user-khepesh kneeling before cartouches of Rameses III. This official was hitherto considered to have built the temple of Rameses II.; but this could have been the case, as there was not more than 32 years between those kings, so that he might have acted in both buildings.

GARROD, D.—*Excavations at the Mugharet al Wad.*—This cave near Athlit contained, in parts, 9 feet of deposits. The periods distinguished are (1) Bronze Age and later, (2) Mesolithic, (3) Capsian, (4) Middle Aurignacian, (5) Lower Middle Aurignacian, (6) Mousterian. Outside of the cave was a bed of red earth with flint and bone implements, but no pottery, hence called Mesolithic. Under it were three burials, near the bed-rock. Each body lay on a hearth with animal bones, and packed around with stones. By one body a conical hole had been cut in the rock, with a raised band left around it. On this band and near it were several square blocks of limestone, whether fractured or dressed is not stated. A large number of sickle flints and hafts show that agriculture existed, though no pottery. In Europe both arts are considered to have arrived together, and it is suggested that they started in different centres, and only coalesced in the European movement. It must, however, be remembered that in hill sites of Biblical period in Palestine there is no pottery, as the people kept the nomadic use of skin and wooden vessels.

July, 1931.—CROWFOOT, J. W.—*Expedition to Samaria-Sebastiya.*—A portion of the massive city wall of Israelite age was cleared, south of the basilica. This is three courses deep, with two headers between the stretchers. This part is 350 yards from the part previously found. Nothing earlier than Omri has yet been reached.

CROWFOOT, J. W.—*Around the fountain court at Jerash.*—A small temple has been found beneath the cathedral. In a court near the fountain was over a hundredweight of glass, stock-in-trade of a glass factory. There are two mosaic floors, the lower one probably Theodosian, the upper one after Valentinian I. The previous sanctity of the place as a shrine of the Arabian god Dusares is discussed.

TURVILLE PETRE, F.—*Dolmen Necropolis near Kerazeh, Galilee.*—Many dolmens have been cleared and planned. One contained coins from Domitian to Hadrian. A tumulus of small stones covered each. Potsherds were Roman, but all such remains are due to secondary use, and the structures are attributed to Bronze Age.

GRANT, ELIHU.—*Ain Shems*, 1931.—The city was active 2000–1200 B.C., and important 1200–1000, finally ruined in 600 by Babylonians.

MAISLER, B.—*Hebrew Ossuary inscription*, for "Shalamsi, daughter of Shammai."

Antiquity, December, 1930.

This has an excellent article by M. Schaeffer on the Ras Shamra antiquities, already noticed in *Syria*.

BALL, J.—*The Faiyum Depression.*—This summarises recent views about the great Fayum basin, accepting Miss Caton Thompson's view which ignores the historical evidence. Drs. Sandford and Arkell's work dates the origin of the basin in the Pliocene age, and they conclude that it drained out continuously into the Nile valley. A strange statement is made—"Of the late palaeolithic and neolithic periods no traces were found in the Nile valley"; but at the mouth of the Fayum gorge a large deposit of Mousterian flints was found on the desert edge, and published in *Lahun II*, xxxvii, xxxviii.

Page 483. SAWYER, E. H.—*Babylon of Egypt.*—This gives a plan of the Roman fortress, and a view of the entrance since it has been excavated.

June, 1931.

REISNER, G. A.—*Stone Vessels found in Crete and Babylonia.*—This title omits the main subject, which is the comparison with Egypt. Certain principles are formulated: (1) The whole range of a type in Egypt is to be regarded when making comparative dating elsewhere. (2) There must be identity in form, material, and technique, before making valid equations. (3) Primitive peoples in similar culture, with similar needs and materials, are apt to produce similar objects.

On these principles, and studying closely the details, Dr. Reisner cannot agree to any of the Sumerian stone vessels being identical with the Egyptian. Even the cylinder jars show differences. The qualities of alabaster do not seem to be the same as in Egypt.

[All of these conclusions quite agree with my own examination of the material.—F. P.]

Bulletino dell' Associazione Internazionale per gli Etudi Mediterranei. (Villa Celimontana, Roma.)

1931, Feb.—*Scavi della Missione Archeologica Italiana a Tebtunis.*—This gives a brief account of the Fayum work. Previous workers had obtained many papyri, but very scant archaeological results. The present work has gained much information. The plan of the city has been surveyed, the broad via Regia identified, and the houses planned. Finally the pre-Ptolemaic strata have been reached, which it is hoped to work in future. A hundred crocodile mummies were found, which it is expected may contain papyri. A plan and

four photographs illustrate the work. Prof. Hrozny reports the Czechoslovak work at Kultepe, near Caesarea. A large building was cleared, which had been burnt probably in the XIIth century B.C. by the northern peoples who crushed the Hittite Kingdom. In a field east of the tell were found nearly 1,000 tablets in cuneiform, belonging to commerce with Assyria and Mesopotamia.

April–May.—PRZEWORSKI, S.—*Eine neue statuette von Reschef.*—Five figures of Reschef are here published, from Hildesheim, Minet el Beida, Louvre, and two dealers, and several others are listed.

Blackwood's Magazine.

1931, Feb.—JARVIS, C. S.—*The Forty Years' Wanderings.*—This is a discussion of the northern and the southern routes of the Exodus. Major Jarvis, the Governor of Sinai, argues strongly for the northern route, from practical knowledge. He states that the only evidence in favour of southern Sinai is tradition, but omits to explain Elim with 70 palms, or Paran=Feiran, neither of which are to be found on the desolate north coast. Pihahiroth was about the head of the Bitter Lakes, and immediately after that they passed through the sea into the wilderness. None of this seems applicable to the northern route. On the other hand, it is argued that the quails are found on the coast, and tamarisk for manna is common there.

After all, the essential matter is the local description given by the Israelites. What they believed is plain, though in what may be a later summary. In Deut. i., 5, "in the land of Moab began Moses to declare this law," that is unquestionably east of the Dead Sea valley; and in i., 1, "the words which Moses spake unto all Israel on this side Jordan, in the wilderness in the plain over against the Red Sea (yam Suf) between Paran and Tophel and Laban and Hazeroth and Dizahab." Now it is impossible in the east of the Dead Sea to be over against the Mediterranean, but rather against the Gulf of Akaba, which is all one with the Dead Sea valley and the Gulf of Suez. It is unquestionable that the writer of Deuteronomy i. regarded the Yam Suf as being far from the Mediterranean. Nor can the position of the Red Sea be on the Mediterranean, as that is always called the Great Sea (yam ha-gadhol). As in other proposals, we can only say if the Suez-Paran route is not true, then the accounts of travel have been written later to fit that region.

Journal of the Manchester Egyptian and Oriental Society. 1931. 7*s.* 6*d.*

HOOKE, S. H.—*Mixture of Cults in Canaan.*—This paper dwells on the change in our ideas about Canaanites. Instead of supposing they were uncouth barbarians we now know that there was considerable civilisation. The writer might have strengthened his view by the Canaanite city unearthed at Gaza, which is as well ordered as a Greek city. We may look on the Israelite invasion much as we should on a Wahaby invasion of western Palestine now. The variety of cults is noted as showing that there was no homogeneous religion, and the pagan Arab customs dwelt on by Robertson Smith may be the relics of a higher culture. Dr. Jirku has lately studied the Pentateuch laws, and perceives ten classes, each of which has a separate introduction, probably the compilation of special codes differing in origin. "These findings throw the general picture of Hebrew religious organisation back into a much earlier stage of settled life in Canaan than the orthodox Wellhausen view of the nomadic origin of Hebrew religion allows."

NOTES AND NEWS.

UNIVERSITY COLLEGE, GOWER STREET.

Thursday, 19th May .. 2.30.
Saturday, 21st May .. 3.0.
Tuesday, 24th May .. 5.30.

The annual lecture on the latest discoveries will be given three times by Sir Flinders Petrie on the above dates. Admission free, *without ticket.* The subject will be the Palaces of Ancient Gaza, illustrated by lantern.

EXHIBITION OF COPPER AGE, CANAANITE, AND HYKSOS ANTIQUITIES.

July 11th—August 6th.

The annual exhibition of antiquities from Tell el Ajjūl, the ancient Gaza, will be open from 10 till 5 daily (except Sundays and Bank Holiday), also on evenings of July 15 and 25, hours 6 till 7.30. Admission free, *without ticket.* Readers are asked to make these lecture and exhibition dates as widely known as possible. No intimation will be sent individually, but they will be announced in the press.

As many donations were delayed, some ceased, and the majority are postponed, there was little of the usual funds forthcoming last autumn, for excavations on the large scale necessitated by this important site. The support from New York University, which had provided one quarter of the expenses the previous year, was also withdrawn. With much regret, therefore, we were obliged to draw out capital for most of the work. This can to some extent be remedied, and enough retained for publication of the results, if any guineas that can be spared are now sent in to the London Office (Lady Petrie, University College, Gower Street, W.C.1, crossed Barclay & Co.).

An additional seven shillings secures this and three following parts of *Ancient Egypt.*

All arrears are urgently solicited, and any donations towards the upkeep of the excavations.

H. Petrie,
Hon. Organizing Secretary.

Tell el Ajjūl.